Remarks

Claims 8–23 remain pending in the application. In the Office action dated Jan. 14, 2008, claims 8–15 were objected to as containing informalities, claims 20, 22, and 23 were rejected under 35 USC 102 over Breacker et al., and claims 20 and 22–23 were rejected under 35 USC 103(a) over Müller et al. Claim 21 was rejected under 35 USC 103(a) as obvious over Müller et al. in view of Griffin and Breacker et al. in view of Griffin. Claims 16–19 were allowed, and claims 8–15 were indicated as being allowable if the informalities were corrected.

Correction of Informalities

Claim 8 has been amended to correct a typographical error in the spelling of "web", and to change "second wrap function" to "second wrap angle function" in one instance.

Rejections of claims 20–23 over Breacker et al.

The examiner contends that Braecker et al. "discloses a paper wound into a web roll 10 through a winding nip ... the web defining a wrap angle ... by adjusting the roller 19, which causes the angle to change ... as it passes through the nip...." The tension roller 19 of Braecker et al. is mounted on a pivoting arm, as shown in FIG. 14, and is clearly indicated to take on alternate positions in the broken lines of FIGS. 6–10. However, in FIGS. 5–10, the finger stops 17 and 18 engage the web, and hence *prevent its being wound.* Thus, although the wrap angle of the wound web appears to change between FIGS. 10 and 11, this change does not take place "during the course of winding"–it takes place during the cutting and threading of the web in the course of installing a new roll core or mandrel M. The specification makes clear that the tension roller 19 serves to draw back the web, as shown in FIG. 6, only when a catch mechanism is released, after a completed roll is discharged. Prior to this time (i.e., during the winding of the roll) downward movement of the tension roller 19 is prevented by the catch mechanism which holds up the roller (col. 2, line 69–col. 3, line 1).

As shown in FIG. 10, once the web end has been secured to the roll core, the drive

rollers 11, 12, 13 begin to rotate, but the finger stops 17, 18 "still hold the web and the initial rotation of the empty mandrel thus causes the web to tension and raise the tension roller 19 back to its original position where its holding catch again retains it." (Col. 3, lines 38–44.) In other words, the position of the tension roller *does not move* once the winding is underway, and the earlier description with respect to FIG. 6 shows that the catch retains the tension roller 19 until winding is complete.

Even if this initial period of tensioning were to be considered to be "during the course of winding" there is yet another aspect of the Breacker et al. disclosure that shows its lack of relevance. In FIG. 4, as the wound roll is discharged from the winding location, the web end extends from left to right. Thus, as shown in FIG. 10, the winding nip is located between the roll M and the drive roll 11 on the left. Furthermore, it appears that the web passes over the drive roll 12 before making its way to the nip. Thus, even if the roll 19 were to be moved during the winding, it would *not affect the wrap angle* of the web entering the winding nip.

Thus Breaker et al. does not disclose "controlling the structure of the web roll being formed by adjusting the wrap angle of the web as it passes through the nip during the course of winding the web roll" as required by claims 20–23.

Rejections of Claims 20–23 over Müller et al., Griffin, & Breacker et al.

Müller et al. concerns the winding of a steel web onto a roll after it has passed between two rollers. It is noted, of course, that a steel web can be expected to have very different properties from a paper or board web. Nevertheless, an examination of the arrangement of Müller et al. in FIGS. 1–5 shows that the steel web passes freely onto the wound roll, and is not engaged against the roll by a nipping roller. In other words, *there is no winding nip* defined between the web roll and a winding drum. The adjustment of the engagement angles between two upstream rollers certainly does not teach, and would not even suggest the adjustment of the wrap angle of the claims. However, the alternative embodiments shown in FIGS. 5 and 6 of Müller et al. do indeed have a winding nip, but in those arrangements the other rolls have a fixed relationship between each other so there is no

adjustment of the wrap angle possible when a nip is defined. As defined by claim 20, the "wrap angle" is "the amount the web *wraps the winding drum* before entering the nip [emphasis added]". The wrap angle of web on the "winding drum" 5 is not disclosed as being variable, because both the winding drum 5 and the separating roller 3 are mounted to the rocker arm 12 about axes which are not shown as moving with respect to the rocker arm. As a result the relationship of the separating roller 3 to the winding drum 5 remains unchanged, and the wrap angle as defined by claim 20 cannot be adjusted.

For the reasons stated above with respect to claim 20, claim 21 is likewise not obvious, and adds further limitations to the invention of claim 20.

Applicant believes that no new matter has been added by this amendment.

Applicant submits that the claims, as amended, are in condition for allowance. Favorable action thereon is respectfully solicited.

Respectfully submitted,

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